



## RIPCON CONFIGURATION SOFTWARE

for ripple remote control radio receiver  
of type TS-71-2

with changes valid to: 22.04.2015

Features and specifications are subject to change.

### USER MANUAL

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**KEEP THIS INSTRUCTION MANUAL.**

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## 1. INSTALLATION

Please insert the CD into the CD-ROM drive and follow the instructions in accordance with dialog windows on your screen.

If your computer is off feature, "Windows autorun", then you need to "Setup" menu to run manually. Simply run the file "setup.exe" on the CD-ROM in Windows Explorer (in the folder on the CD-ROM).

## 2. OPERATION

After installing the program, you see its icon on the desktop of your Windows system.

Start the program by double-clicking the icon RIPCON.

It appears the main window of RIPCON on the screen.

### 2.1 Chart "File" ("Datei")

This chapter describes all the menu items, which are located under the "File" ("Datei") chart.

#### 2.1.1 "New" ("Neu")

Using this menu item you can reset all settings and this item can also create new settings for the TS 71.

But first enter the new name of the setting.

#### 2.1.2 "Open" ("Öffnen")

In this menu item can be a TS-71 parameter data are downloaded from the hard disk in PC.

#### 2.1.3 "Save" ("Speichern")

In this item menu, the current parameter data can be saved.

#### 2.1.4 "Print" ("Drucken")

In this menu item, the current parameter data can be printed.

#### 2.1.5 "Exit" ("Beenden")

This menu item exit the program.

### 2.2 Chart "Function" ("Funktion")

On the "Function" chart all the parameters of the TS-71 can be set.

#### 2.2.1 "Protocol Type" ("Telegramm")

In this menu item the protocol type of ripple control receiver can be set. There is available template list in the software of the most common types of protocols. If the desired protocol is not listed, all values can be edited manually.

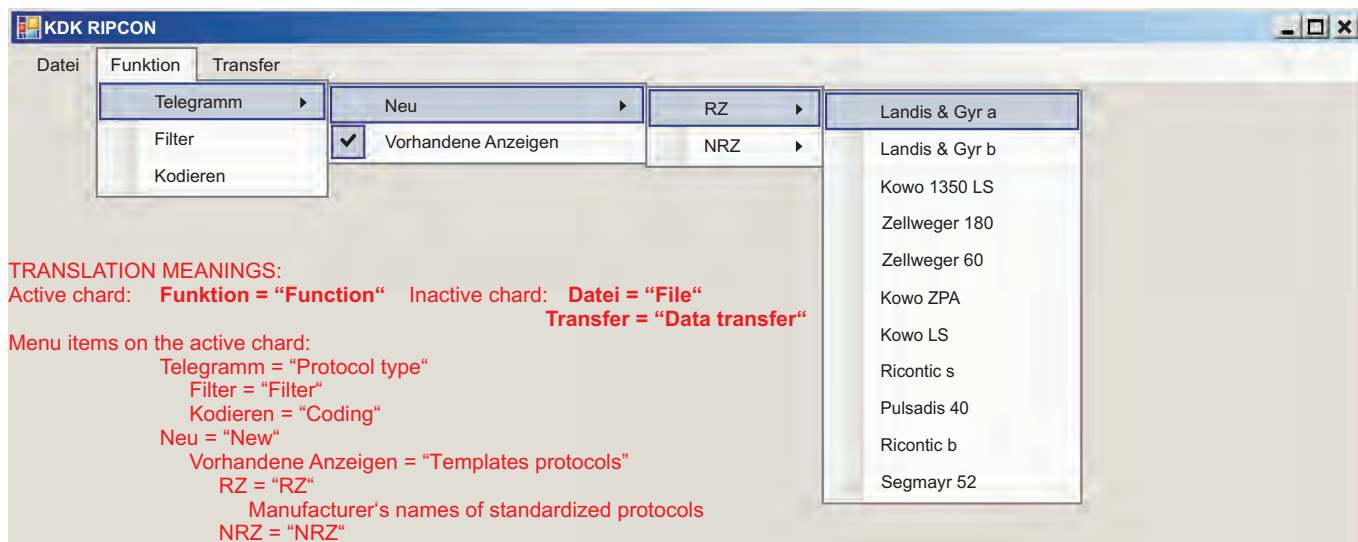


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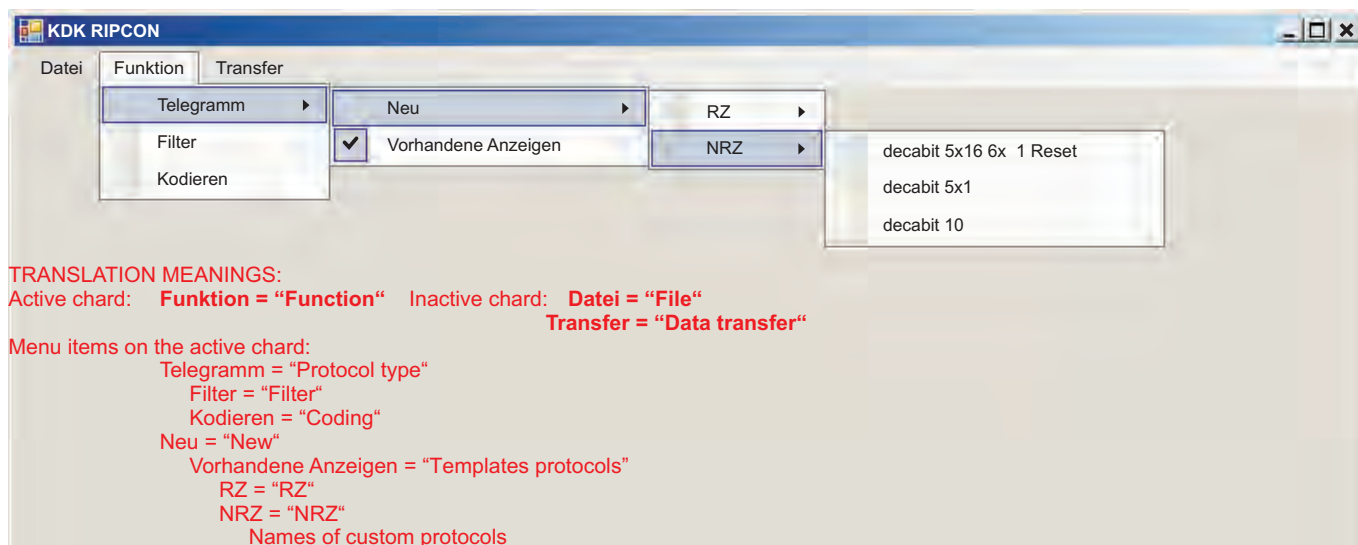
## 2.2.1.1 "New" ("Neu")

Under this menu item new protocols can be created.  
See Pict. 1 and Pict. 2

Pict. 1 RZ protocols



Pict. 2 NRZ protocols



Once a protocol has been selected, the entry dialog appears for the log settings. see Pict. 3

Pict. 3

The screenshot shows the 'KDK RIPCON' dialog box with the following parameters and values:

Parameter	Value	Unit
Telegramtyp : Kowo 1350LS (Protocol type)		
Projektname: ESE_216 (Name of setting)		
N - Anzahl der Kontrollimpulse (Number of control pulses)	48	
T1min Minimale Länge des Startimpulses (Minimum length of the start pulse)	1300	ms
T1max Maximale Länge des Startimpulses (Maximum length of the start pulse)	1820	ms
T2min Minimale Zeit bis zum ersten Impuls (Minimum time to first pulse)	1850	ms
T2max Maximale Zeit bis zum ersten Impuls (Maximum time to first pulse)	2130	ms
T3min Minimale Länge des Kontrollimpulses (Minimum length of the control pulse)	100	ms
T3max Maximale Länge des Kontrollimpulses (Maximum length of the control pulse)	400	ms
T4 Telegramm - periode (Protocol type - period)	577	ms
Pmax Zulässige Pause im Impuls (Permitted delay in pulse)	40	ms
Rmin Minimale Länge des Abbruchimpulses (Min. length of the termination pulse)	65535	ms
M Anzahl der Impulse 1 im Telegramm (Number of pulses 1 in the protocol)	0	
Abbruch Impuls in der Pause (Termination pulse during the delay)	<input type="checkbox"/> Ja (Yes)	

In the dialog box you can now enter all the parameters in accordance with the requirements of the ripple control system.

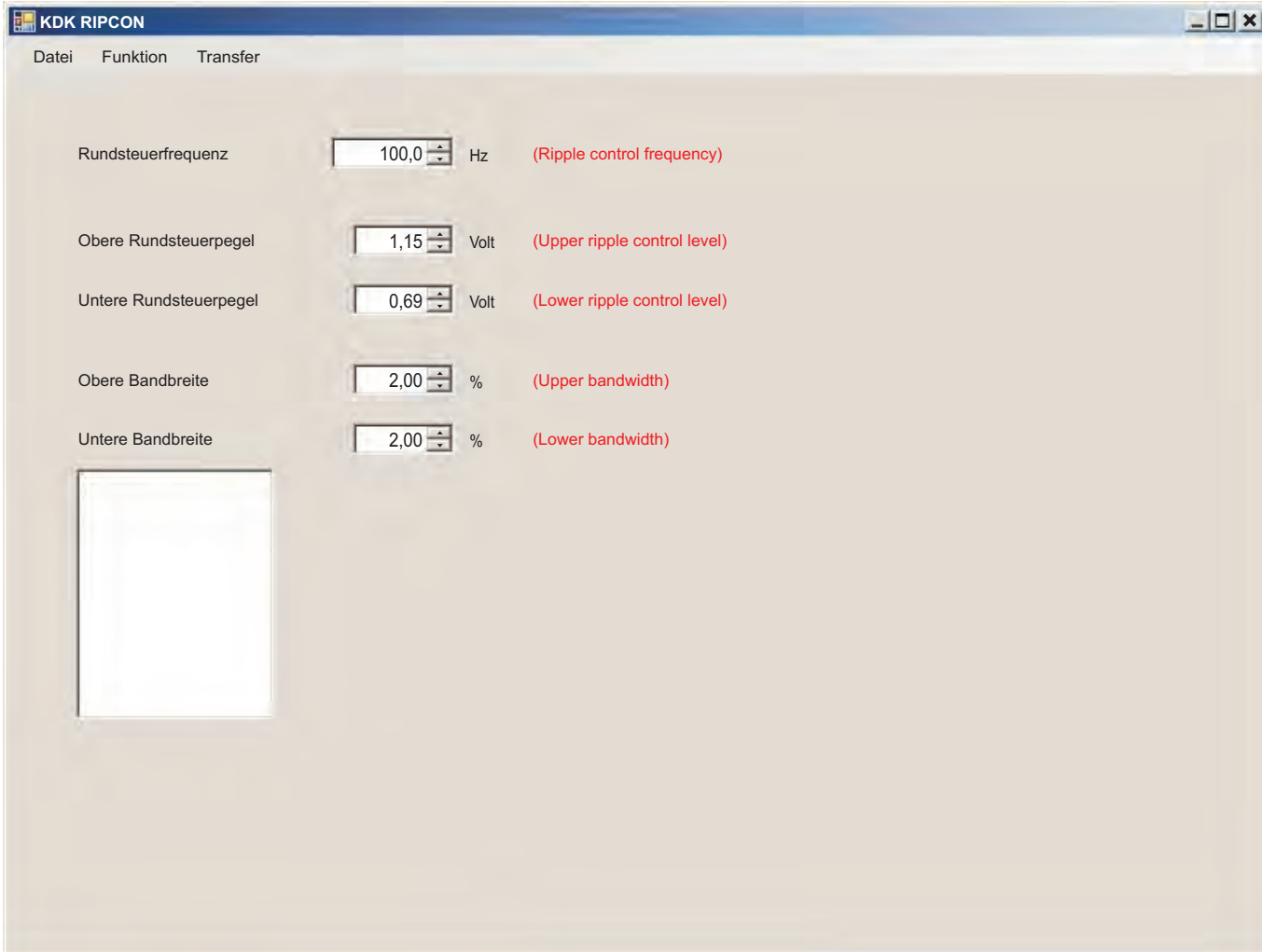
### 2.2.1.2 Menu display templates protocol

If this menu item is selected, the dialog box (see Picture 3) appears with the values that were previously specified or retrieved from the hard disk.



### 2.2.2 “Filter” (“Filter”)

In this menu you can specify a filter input for the centralized control frequency of the transmitter.  
(See Picture 4)



The screenshot shows the 'KDK RIPCON' software window. It has a menu bar with 'Datei', 'Funktion', and 'Transfer'. The main area contains several settings with input fields and labels:

- Rundsteuerfrequenz**: Input field '100,0' followed by 'Hz' and '(Ripple control frequency)' in red.
- Obere Rundsteuerpegel**: Input field '1,15' followed by 'Volt' and '(Upper ripple control level)' in red.
- Untere Rundsteuerpegel**: Input field '0,69' followed by 'Volt' and '(Lower ripple control level)' in red.
- Obere Bandbreite**: Input field '2,00' followed by '%' and '(Upper bandwidth)' in red.
- Untere Bandbreite**: Input field '2,00' followed by '%' and '(Lower bandwidth)' in red.

Below these settings is a large empty rectangular box.

Picture 4

The level and bandwidth set up kindly to fit adequately to the specification of your ripple control system.

### 2.2.3 "Coding" ("Kodieren")

In this menu you can set the encoding of the ripple control signal with the effect on the respect relay.

In RZ protocols You can choose the following settings per coding number.

0

0

1

Ausführen ("Run")

Keine ("None")

For NRZ protocols are not available commands "None" and "Run," which are here always executed at the end of the protocol.

Each row can be assigned to a command for each relay.

Relay command are: On ("Ein") / Off ("Aus") / Invert ("Inverted") / No ("Keine")

KDK RIPCON
Datei = "File"    Funktion = "Function"    Transfer = "Data transfer"

Num	Rei...	Rei...	Rei...	Rei...
1	1	1	Keine	Keine
2	Keine	Keine	Keine	Keine
3	Keine	Keine	Keine	Keine
4	Keine	Keine	Keine	Keine
5	Keine	Keine	Keine	Keine
6	1	Keine	Keine	Keine
7	Keine	1	Keine	Keine
8	Keine	Keine	Keine	Keine
9	Keine	Keine	Keine	Keine
10	Ausführen	Keine	Keine	Keine
11	Keine	Ausführen	Keine	Keine
12	Keine	Keine	Keine	Keine
13	Keine	Keine	Keine	Keine
14	Keine	Keine	Keine	Keine
15	Keine	Keine	Keine	Keine
16	Keine	Keine	Keine	Keine
17	Keine	Keine	Keine	Keine
18	Keine	Keine	Keine	Keine
19	Keine	Keine	Keine	Keine
20	Keine	Keine	Keine	Keine
21	Keine	Keine	Keine	Keine
22	Keine	Keine	Keine	Keine
23	Keine	Keine	Keine	Keine
24	Keine	Keine	Keine	Keine
25	Keine	Keine	Keine	Keine

Aktion Relais 1 wiederholen

nach  Sek. ☐ Aktiv

Aktion Relais 1 nach Stromwiederkehr

☒ alter Zustand   ☐ Ein   ☐ Aus

Aktion Relais 2 wiederholen

nach  Sek. ☐ Aktiv

Aktion Relais 2 nach Stromwiederkehr

☒ alter Zustand   ☐ Ein   ☐ Aus

Relais	Rei...	Rei...	Rei...	Rei...
1	Ein	Invertiert	Keine	Keine
2	Keine	Aus	Keine	Keine

TRANSLATION MEANINGS IN POP-UP WINDOWS:  
Window header: "Num" ... Number, "Rei..." ... Series

"Keine" ... None

"Ein" ... On

"Ausführungen" ... Executing

"Invertiert" ... Inverted

"Aus" ... Off

In the right half of the window on the screen the special characteristics of the relay switching can be defined. Timer function can be set after this switching time in case it is needed again, if no other new ripple control signal is received within the time set for the relay.

**The time can be set from 1 second to 1,000,000 seconds (277 hours).**

Then can be set relay switching when the device is reactivated again after a power failure.



### **2.3 Chart "Transfer" ("Transfer")**

With the help of this menu item all settings are transmitted to the ripple control receiver via the serial interface.

Please choose the COM port (RS 232 PC serial port) via which the TS-72 programming adapter is connected to the PC. It will automatically detect the COM port displayed that provides the PC.

Now connect the programming adapter with the ripple control receiver. The red LED in the TS-71 must begin flashing every second, which means that TS-71 is ready to receive data from a PC. Otherwise, TS-71 is not ready to receive any data.

In standby mode TS-71 to receive data you can then choose from the menu "Transmit RSE" ("An RSE übertragen").

If the data transmission was successful this will be displayed on the screen.  
The TS-72 is now ready for use.

Via this menu item "Transmit RSE" ("An RSE übertragen"), the data can be read from the ripple control receiver again.

The screen also displays the message even if the data transfer was unsuccessful.  
In this case must be checked again whether all cables are connected properly and the correct COM port has been selected.

Please also make sure that the COM port is not in use by another Windows application.

#### **Your partner for measuring the energy**

DIN RAIL MOUNTED kWh METERS  
RE/CONDITIONED kWh METER  
PRE/PAYMENT kWh METERS  
CREDIT CARDS kWh METERS  
GSM OPERATED kWh METERS  
SPECIAL kWh METERS  
OTHERS FOR THE MEASUREMENT OF EL. ENERGY  
CURRENT TRANSFORMERS  
MEASURING POWER IN HARBORS AND ANCHORAGE SHIP  
(MARINAS)  
MEASURING POWER IN THE CAMP, IN TRADE FAIR,  
EXHIBITION, BUSINESS, COMMERCIAL AND  
ADMINISTRATIVE CENTERS  
ENERGY MANAGEMENT SYSTEMS  
(M-Bus, PLC, GSM, RS-485, EIB, INSTA-BUS)

Our advice is for You with pleasure